














Commonwealth of Virginia
Balanced Scorecard Project Evaluation
for VDOT's
Roadway Network System (RNS)

Criteria	Score	Comment
<u>Stakeholder Perspective</u>	G	
1. To what degree does the proposed investment result in significant tangible and intangible benefits for stakeholders?	G	<p>Significant tangible benefits valued at \$8,452,500 are identified and substantiated in the project proposal. The tangible benefits are comprised of \$8,102,500 in costs savings and \$350,000 from cost avoidance as follows:</p> <p>Cost Savings:</p> <ul style="list-style-type: none"> • Remove HTRIS from the main-frame - \$1,750,000 • Eliminate the Extraction/Transformation/Load (ETL) process - \$205,000 • Re-engineer roadway acceptance process - \$3,655,000 • Increase revenue by improving inventory reporting - \$142,500 • Integrate bridge functionality into the Pontis System and eliminate duplicate data entry and reconciliation - \$1,950,000 • Create electronic M-20 file and eliminate manual processing - \$200,000 • Reduce programming support with addition of ad-hoc reporting capability - \$200,000 <p>Cost Avoidance:</p> <ul style="list-style-type: none"> • Eliminate need to develop data extracts to feed four VDOT systems - \$350,000 <p>Intangible benefits identified and described are:</p> <ul style="list-style-type: none"> • Temporal synchronization of critical project data









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		<ul style="list-style-type: none"> Improved estimating of pavement measurements for maintenance and operations activities Improved customer service to the public Improved emergency response and preparedness
2. To what degree does the proposed investment target stakeholders that have been chronically underserved by information technology investments?		Stakeholders are currently served by the existing HTRIS system. The new system would enhance current services and spatially enable the data.
3. To what degree does the proposed investment increase public protection, health, education, environment, or safety?		The proposed investment will improve public safety through improved reporting of road conditions to the general public and state and federal agencies during emergencies.
4. To what degree does the proposed investment anticipate improvements to internal and external customer service delivery (e.g., faster response, greater access to information, elimination or reduction in client complaints)?		Extensive improvements to internal and external customer service delivery is identified and justified. VDOT personnel performed an extensive evaluation of the current HTRIS business processes and documented potential process improvements for all HTRIS functionality being replaced.
5. To what degree does the proposed investment increase citizen access to government services?		It is noted in the proposal that RNS data could potentially be made available to citizens through Web-based systems currently implemented at VDOT. However, the development and implementation of citizen access is not specifically addressed in the project scope and is not identified as a benefit.
<u>Business Process Perspective</u>		
6. To what degree does the proposed investment result in information sharing between organizational units throughout the proponent agency?		Improved information sharing between organizational units is identified and justified. VDOT personnel performed an extensive evaluation of the current HTRIS business processes and documented potential information sharing improvements.

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7. To what degree does the proposed investment anticipate greater flexibility in agency responses to stakeholder requests, reduction, or elimination of paperwork or manual tasks?		Flexibility in agency responses to stakeholder requests and elimination of paperwork and manual tasks are identified and justified. VDOT personnel performed an extensive evaluation of the current HTRIS business processes and documented potential process improvements for all HTRIS functionality being replaced.
8. To what degree does the proposed investment anticipate improved use of resources, improved turnaround time, or expanded capacity of key processes?		Approximately \$6 million in cost savings are identified as a result of improved use of resources, improved turnaround time, and expanded capacity of key processes.
9. To what degree does the proposed investment support legal or regulatory requirements?		The proposed RNS directly supports data feeds to the Highway Performance Monitoring System, which are required for receipt of federal funding.
10. To what degree does the proposed investment synchronize with mission needs, agency critical issues, and core business activities?		RNS will replace the VDOT HTRIS system. HTRIS is the inventory system for many of VDOT'S roadway assets and contains historical data associated with roadway accidents and traffic counts. The inventory and historical data are critical to management and reporting of the roadway system at the state and federal levels.
11. To what degree does the proponent agency possess demonstrated readiness and capacity to succeed with information technology investments of this magnitude and scope?		VDOT has successfully undertaken many technology implementations of this magnitude.
<u>Project Management Perspective</u>		
12. To what degree does the proposed investment present a sound business case?		Tangible and intangible benefits are identified and well documented. The RNS Analogous Labor Cost Estimate was derived by developing a work breakdown structure (WBS) and by evaluating development costs of another VDOT technology upgrade project.

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13. To what degree does the project proposal or charter adequately establish project scope, cost, and schedule baselines?		Scope, schedule and budget are adequately established for the RNS project.
14. To what degree does the proposed investment have executive-level sponsorship, including the appropriate cabinet secretary?		The project sponsor is the Director of the Information Technology Applications Division. The majority of the cost justification for RNS is based on savings from re-engineering core business processes. Co-sponsors from the core business areas should be identified and held responsible for the delivery of savings from the process re-engineering of their respective business area.
15. To what degree does the project charter define an effective project management organization?		The project manager is certified by the Project Management Institute. The charter defines an effective project management structure with the exception of the project sponsor role. See #14 above.
16. To what degree is adequate and sustained funding insured for the duration of the proposed investment?		The agency acknowledges non-general funds are available for this project.
<u>Financial and Economic Perspective</u>		
17. To what degree will the proposed investment result in a positive return on investment?		The cost/bene fit analysis indicates a positive return on investment in both real and nominal terms.
18. To what degree does the proposed investment target business areas that have been chronically underserved in the past by the lack of investments in information technology?		Business areas are currently served by older technology with limited user interface and accessibility.
19. To what degree does the proposed investment leverage funding from the federal government or from the private sector?		Non-general funds are being used to finance the project. State Planning Resources (federal funds) have been requested, but if obtained, would not exceed 80% of the project cost.

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20. To what degree does the proposed investment lead to increased economic development within the state?	Y	Economic development is not specifically addressed in the proposal. However, RNS is a system that supports delivery and maintenance of the roadway system, which has a major impact on economic development.
<u>Enterprise (Commonwealth) Portfolio Perspective</u>	Y	
21. To what degree does the proposed investment move the Commonwealth toward an enterprise business model with business partners and stakeholders?	Y	<p>The Virginia Geographic Information Network (VGIN) is planning to implement an Enterprise Geographic Information System (GIS). The Enterprise GIS is designed to minimize geospatial application overhead costs and optimize application use by:</p> <ul style="list-style-type: none"> • Coordinating geospatial data collection and maintenance • Streamlining state, local, federal, and public access to geospatial resources • Consolidating distribution, archiving, backup, and security of GIS resources • Establishing and refining standards for geospatial data, technology, and architecture <p>Collaboration between VDOT and VGIN to implement an enterprise GIS solution is not adequately addressed. VDOT will need to work with VGIN to define geospatial data needs and opportunities to leverage both RNS and Virginia Enterprise GIS investments. This effort must be included in the project scope and detailed in the development of the RNS project plan.</p>
22. To what degree does the proposed investment serve multiple agencies through functional and process integration and improved data sharing?	G	The proposal sites "improved and streamlined federal reporting" and "links with two other agency systems" to address improved integration and data sharing.

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23. To what degree does the proposed investment support the enterprise goals of consolidation of infrastructure, security, and administrative systems?	G	The proposed system will reside on VDOT's standard database and operating system, which are Commonwealth standards. The proposal notes that the hosting services for the production environment will be provided by VITA on a lease arrangement.
24. To what degree does the proposed investment help balance the amount of aggregated risk in the Commonwealth portfolio?	NA	
25. To what degree does the proposed investment support the Commonwealth Enterprise Architecture?	G	The proposal indicates compliance with conceptual and technical requirements of the Commonwealth Enterprise Architecture Standard. An Enterprise Architecture review performed by VITA is included in the project documentation.
26. To what degree does the proposed investment maintain the desired portfolio balance between long-and-short term information technology investments?	NA	